

### **REMARKS**

This is in response to the Final Office Action mailed July 6, 2010. Presently, claims 1-6, 8-9, 19, and 20-23 are currently pending herein.

Reconsideration is respectfully requested in light of the comments and amendments herein.

### **The Office Action**

Claims 1-6, 8-9 and 19-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02/07902 (WO'902).

Claims 1-6, 8-9 and 19-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oshima et al, in view of WO'902.

### **The Claims Distinguish Patentably Over the References of Record**

The Office Action maintains the rejection of the subject claims as being obvious in light of WO'902 and/or in light of Oshima in view of WO'902. Specifically, the Office Action submits that although WO'902 teaches a two-step process that produces a two-layer black anticorrosive coating instead of a single layer black chromium coating solution as claimed, there is nothing that says the Cr(III) containing coating solution used in the first coating step of WO'902 is not capable of producing a black conversion coating layer. Therefore, the Office Action concludes that one skilled in the art would have expected that the trivalent chromium coating solution used in the first stage of WO'902's process is capable of producing a black chromate coating layer as claimed. Applicants respectfully traverse.

Specifically, the present claims are directed to an aqueous acidic black chromate conversion coating solution for use on zinc and zinc alloy including trivalent chromium ions, phosphorous anions, anions selected from the group of sulfate ions, nitrate ions, and combinations thereof, at least one transition metal or metalloid selected from groups III, IVa, Va, or VIII, and an organic chelate selected from the group consisting of carboxylic acids, polycarboxylic acids, and combinations thereof. The solution produces a single layer black chromate conversion coating. The Office Action purports that the difference between the coating process of WO'902 and the coating process of the instant application is irrelevant since the scope of the claims are directed to a coating solution rather than a coating process. Applicant submits,

however, that the claims are in fact directed to a coating solution that produces a single layer black chromate conversion coating, which is patentably distinct from the cited references.

WO'902 explicitly recites in the first paragraph of the first page of the translation, "[t]he invention is about an anticorrosive black coating formed by two layers on a zinc alloy and a procedure for making this anticorrosive coating. Additionally, WO'902 states, "the anticorrosive coating produced on the alloy of zinc consists of the superposition of the two individual coatings." Therefore, the entirety of the coating taught in WO'902 comprises two layers that each imparts important functions to the coating as a whole. Particularly, as acknowledged by the Examiner, the second layer contains the black pigments along with metallic oxide anticorrosives, and organic polymers. After describing the organic polymers and metallic oxide anticorrosives, WO'902 teaches that the introduction of these materials in the anticorrosive coating had the advantages over SiO<sub>2</sub> solutions of corrosion protection and maintenance of the black color over time and uniformity. Applicant submits that, when taking the teaching of WO'902 as a whole, one skilled in the art would read the second layer as being a vital component of the overall coating and would have no motivation to disregard this clear teaching and utilize only the first layer.

Applicant asserts that the position afforded in the Office Action to disregard the very teaching of WO'902 to achieve the invention as presently claimed is an impermissible use of hindsight. As noted by the Federal Circuit, "[t]he invention must be viewed not with the blueprint drawn by the inventor, but in the state of the art that existed at the time." Further, "it is impermissible too use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious...one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to depreciate the claimed invention." *In re Fritch*, 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992). The Examiner has failed to point out any teaching or slight suggestion in WO'902 that would lead one skilled in the art to eliminate an entire coating step as suggested. The only motivation to do so is found in Applicant's own disclosure. This is a clear implementation of hindsight and is therefore an improper basis for an obviousness rejection.

Additionally, the Office Action seems to mischaracterize Applicant's position regarding the claimed amounts of sulfuric and/or nitric acid. Particularly, Applicant does not take the position that pH does not affect the coating process and coating quality, and therefore one would

not control the pH by adding sulfuric and/or nitric acids as taught in WO'902. Rather, Applicant submits that since the pH range taught by Applicant (between 0.5 and 3.5, and more preferably between 1.2 and 2.5) is well within the range disclosed in WO'902 (between 1 and 4 and preferably between 1 and 3), one skilled in the art would have no motivation to alter the amounts of sulfuric and/or nitric acid taught in WO'902 in order to achieve a desired pH, as set forth in the Office Action, since the desired pH is already achieved. Further, Applicant submits that since the desired pH is already within the range taught in WO'902, one skilled in the art would actually be discouraged from altering the amount of sulfuric and/or nitric acid in WO'902 to that presently disclosed, for fear of altering the pH out of the desired range.

The Office Action further maintains the position that it would have been obvious to one skilled in the art to produce a black chromate coating from the solution disclosed in Oshima, based on the teachings of WO'902. Although Applicant previously pointed out that since in both Oshima and WO'902 the pigments or dyes are located in a topcoat, the combination of Oshima and WO'902 would result in a two layered coating with black pigment in the top layer, the Office Action maintains that there are various coating components, other than a black pigment, that can be added to the trivalent chromium solution of Oshima to make the resulting coating black, such as phosphate, Fe, Co, and Ni ions that are each added in the first layer. Applicant respectfully disagrees.

Oshima is directed to a solution for forming a corrosion resistant trivalent chromate conversion film on zinc or zinc alloy and, when further improvement is desired, a top coat may be included that can incorporate a dye in order to pigment the topcoat film. Accordingly, Applicant submits that although there are various coating components that can be added into the solution Oshima to make the coating black, one skilled in the art would not be motivated to do so, based on the teachings of WO'902 and Oshima. Oshima explicitly states that a dye may be added to the top coat. Similarly, WO'902 includes the black pigment in the top layer. Therefore, if one wished to implement a black color into the solution of Oshima based only on the teaching of WO'902, and not considering the present teaching of the subject application, the black-color forming components, be it dye or Fe, Co, Ni, or phosphate, would be implemented into the topcoat. The Office Action once again fails to provide any reasoning as to why, one skilled in the art, would disregard the explicit teaching of Oshima, namely to include any dye in the top coat, and instead implement black pigments components in the first layer.

In light of at least the above, it is clear that the teachings of WO'902 and Oshima, individually or in combination, do not teach or suggest the present invention as taught in independent claims 1, (along with claims 2-6 and 8-9 that depend therefrom) 19, and 20 (along with claims 21-23 that depend therefrom). Accordingly, withdrawal of the rejection and allowance of the claims is earnestly solicited.

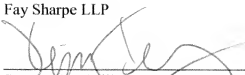
### CONCLUSION

For the reasons detailed above, it is respectfully submitted all claims remaining in the application (Claims 1-6, 8-9, 19, 20-23) are now in condition for allowance.

Respectfully submitted,

Fay Sharpe LLP

9-7-10  
Date

  
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